

**§ 161.002-4 General requirements.**

(a) *Introduction.* The purpose of fire-protective systems is to give warning of the presence of fire in the protected spaces. To meet this end, the basic requirements of the fire-protective systems are reliability, sturdiness, simplicity of design, ease of servicing, and the ability to withstand shipboard shock and vibration and the adverse effects of sea humidity.

(b) *Standards.* (1) All fire-protective systems must be designed, constructed, tested, marked, and installed according to the applicable standards under § 161.002-1 and subchapter J (Electrical Engineering) of this chapter.

(2) All systems must be listed or certified as meeting these standards by an independent laboratory that is accepted by the Commandant under part 159 of this chapter for the testing and listing or certification of fire detection equipment and systems.

(3) All parts of the system must pass the environmental tests for control and monitoring equipment in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1 or pass the Category ENV3 tests of Lloyd's Register Type Approval System, Test Specification Number 1, as appropriate.

(4) Those parts of the system that are to be installed in locations requiring exceptional degrees of protection must also pass the salt spray (mist) test in either ABS Rules for Building and Classing Steel Vessels Table 4/11.1; Category ENV3 of Lloyd's Register Type Approval System, Test Specification No. 1; or ASTM B-117 with results as described in corrosion-resistant finish in § 110.15-1 of this chapter.

[21 FR 9032, Nov. 21, 1956, as amended by CGD 94-108, 61 FR 28292, June 4, 1996; 62 FR 23910, May 1, 1997]

**§ 161.002-8 Automatic fire detecting systems, general requirements.**

(a) *General.* An automatic fire detecting system shall consist of a power supply; a control unit on which are located visible and audible fire and trouble signalling devices; and fire detector circuits, as required, originating from the control unit. Power failure alarm devices may be separately housed from the control unit and may be combined

with other power failure alarm systems when specifically approved.

(b) [Reserved]

[21 FR 9032, Nov. 21, 1956, as amended by CGD 94-108, 61 FR 28292, June 4, 1996]

**§ 161.002-9 Automatic fire detecting system, power supply.**

The power supply for an automatic fire detecting system must meet the requirements of § 113.10-9 of subchapter J (Electrical Engineering Regulations) of this chapter.

[CGD 74 FR 125a, 47 FR 15279, Apr. 8, 1982]

**§ 161.002-10 Automatic fire detecting system control unit.**

(a) *General.* The fire detecting system control unit shall consist of a drip-proof enclosed panel containing visible and audible fire alarm signalling devices, visible and audible trouble alarm signalling devices, visible and audible power failure alarm devices, power supply transfer switch, charging equipment when employed, and overcurrent protection for power supplies.

(b) *Fire alarms*—(1) *General.* The operation of a fire detecting and alarm system must cause automatically—

(i) The sounding of a vibrating type fire bell with a gong diameter not smaller than 15 cm (6 inches) or other audible alarm that has an equivalent sound level and that is mounted at the control unit and at the remote annunciator panel, when provided;

(ii) The sounding of a vibrating type fire bell with a gong diameter not smaller than 20 cm (8 inches) or other audible alarm that has an equivalent sound level and that is located in the engine room; and

(iii) an indication of the fire detecting zone from which the signal originated, visible at the control unit and at the remote annunciator panel, when provided;

(2) *Maintaining alarm.* The audible and visible alarms resulting from the operation of a fire detector having self-restoring contacts shall be maintained automatically by the control unit until a resetting device is operated manually.

(3) *Silencing audible alarm.* Manual means shall be provided at the control unit to silence the audible fire alarms,